

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Antire Creek

Water Body ID: 2188

Water Body Segment at a Glance:

County:	St. Louis
Nearby City:	Eureka
Length:	1.9 miles
Pollutant 1:	Bacteria (<i>E. coli</i>)
Source 1:	Urban runoff/Storm sewers
Pollutant 2:	pH
Source 2:	Unknown



Schedule for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Antire Creek is impaired due to exceedances of state water quality criteria that protect aquatic life and whole body contact recreation designated uses.

Designated uses of Antire Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated uses that are impaired

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)

Criteria that apply

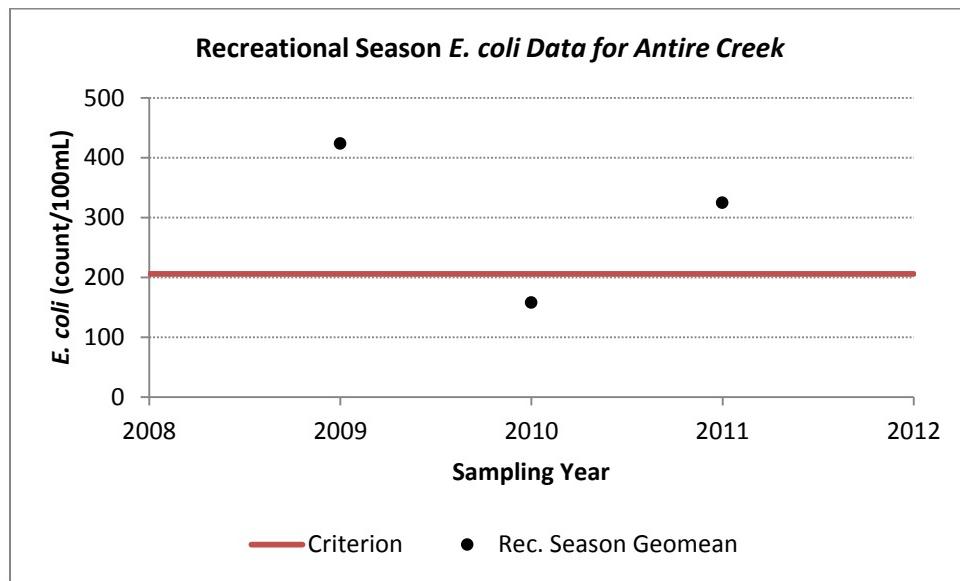
- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 206 counts per 100 milliliters of water (206 /100 mL) for Category B waters during the recreational season. The recreational season is defined as being from April 1 to October 31.
- The specific criteria for pH are found in 10 CSR 20-7.031(5)(E). Water contaminants shall not cause pH to be outside of the range of 6.5 to 9.0 standard pH units.

Background information and water quality data

Antire Creek is a small stream near the St. Louis-Jefferson County boundary and is a tributary to the Meramec River. The stream is designated as Category B for the whole body contact recreation use, which means it has places deep enough for total immersion (i.e., swimming), but they may be on private lands and are not designated as public swimming areas.

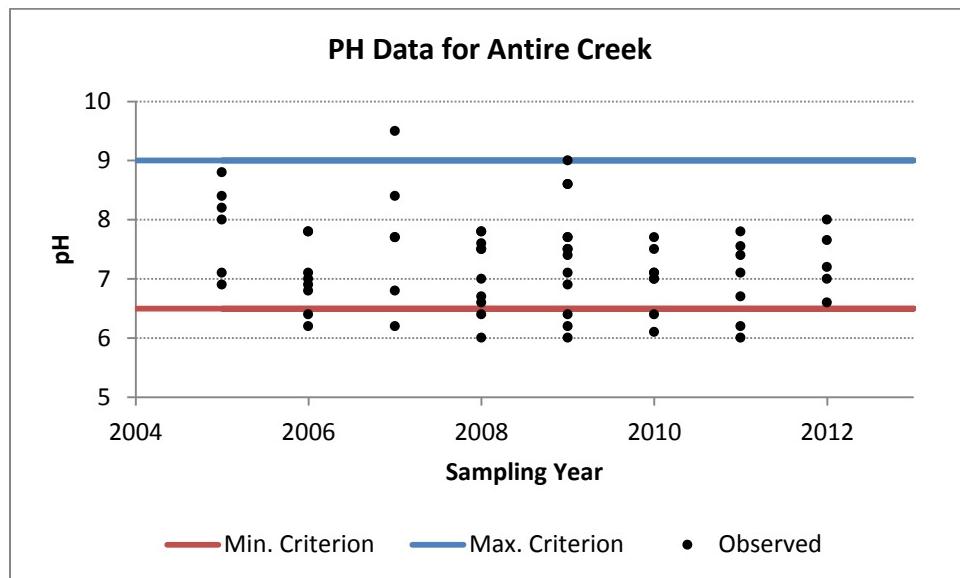
Bacteria Impairment

The department judges a stream to be impaired by bacteria if the water quality criterion for *E. coli* is exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season). High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses.



pH Impairment

For pH, a water body is assessed as impaired if more than 10 percent of available pH measurements violate the state's pH criteria. In Antire Creek, 12 of 63 pH measurements, or 19 percent, collected from 2005 to 2012 exceeded the pH water quality criteria. For this reason, Antire Creek is listed as impaired for pH.



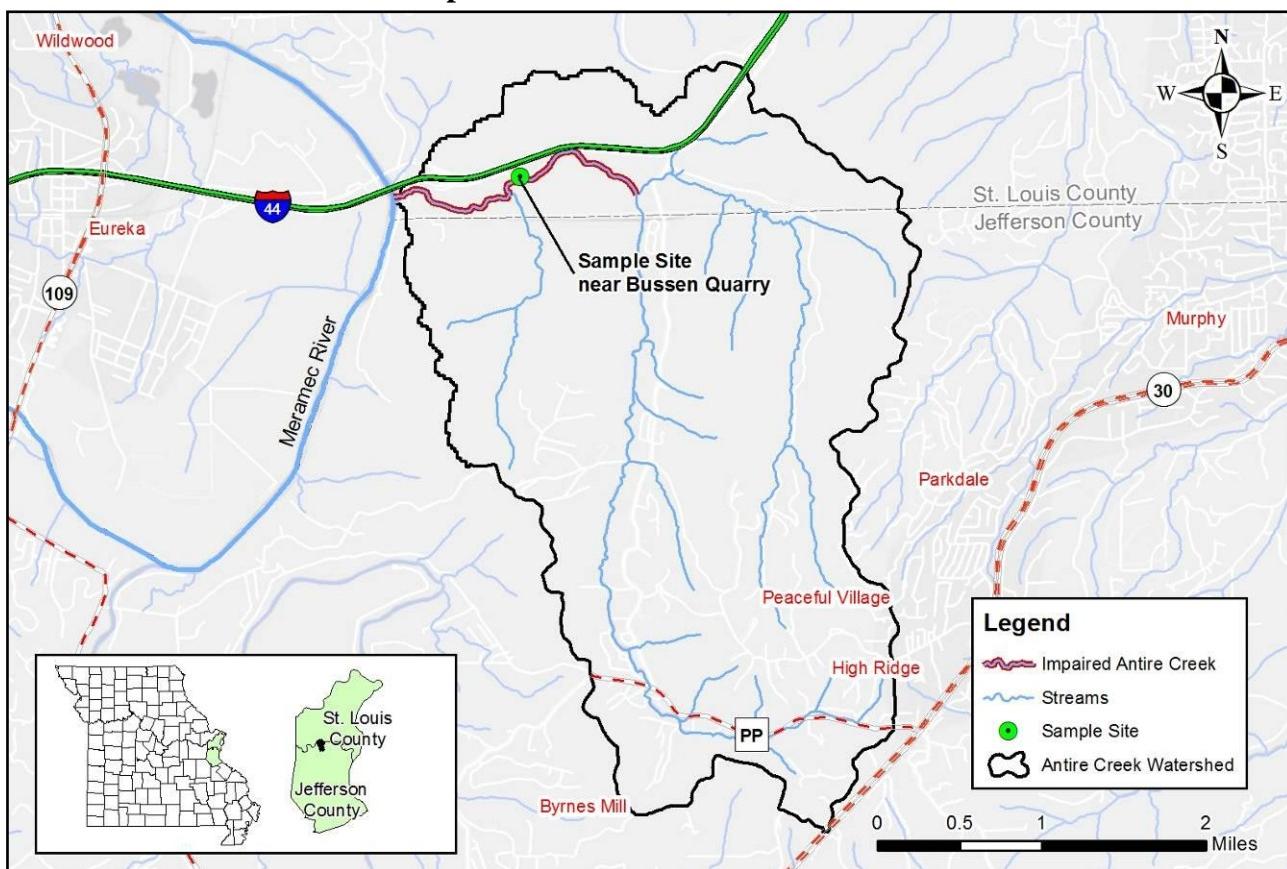
TMDL for Antire Creek

The Antire Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Antire Creek TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

Department of Natural Resources
Water Protection Program – Watershed Protection Section
P.O. Box 176
Jefferson City, MO 65102-0176
Ph: 1-800-361-4827 or 573-751-1300
Fax: 573-526-6802
Email: TMDL@dnr.mo.gov
Program Home Page: dnr.mo.gov/env/wpp/index.html

Map of the Antire Creek Watershed



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